

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application Of:

Fujio Kuwako

Application No.: Not Assigned

Filed: Not Assigned

For: Method For Producing Multi-Layer Printed  
Wiring Boards Having Blind Vias

Atty. Docket No.: 47163-00018USD1

Examiner: Not Assigned

Group Art Unit: Not Assigned

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231, on June 9, 2000

Signature:

*Tracey P. O'Leary*



INFORMATION DISCLOSURE  
STATEMENT UNDER 37 C.F.R. §§ 1.97 AND 1.98

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered, and the references listed on enclosed Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed references are not enclosed, since they were submitted to the Patent and Trademark Office in the parent application, Serial No. 09/229,225.

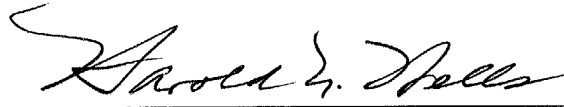
In accordance with 37 C.F.R. §§ 1.97(g) and (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, or an admission that the information disclosed is, or is considered to be, prior art with respect to the present application or material to patentability, as defined in 37 C.F.R. § 1.56.

This Information Disclosure Statement is being filed prior to receipt of a first Office Action reflecting an examination on the merits and, hence, is believed to be timely in accordance with 37 C.F.R. § 1.97(b). Accordingly, no fee is believed to be due. Should any fee be deemed necessary (except payment of the issue fee), however, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Deposit Account No. 10-0447/47163-00018USD1. A duplicate copy of this Statement is enclosed for that purpose.

Respectfully submitted,

Date: \_\_\_\_\_

6/9/02



Harold N. Wells  
Reg. No. 26,044  
Jenkins & Gilchrist  
1445 Ross Avenue  
Suite 3200  
Dallas, Texas 75202-2799  
(312) 744-0090  
For the Applicant

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**FEE TRANSMITTAL****Complete if Known**

Application Number	Not Assigned
Filing Date	Not Assigned
First Named Inventor	Fujio Kuwako
Group Art Unit	Not Assigned
Examiner Name	Not Assigned
Attorney Docket Number	47163-00018USD1

**TOTAL AMOUNT OF PAYMENT** (\$ ) 690.00**METHOD OF PAYMENT (check one)**

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:

Deposit Account Number **10-0447/47163-00018USD1**Deposit Account Name **Jenkins & Gilchrist**

- ☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 ☐ Charge the Issue Fee Set in 37 CFR 1.18 at the Mailing of the Notice of Allowance, 37 CFR 1.31(b)

2. ☒ Payment Enclosed:  
☒ Check ☐ Money Order ☐ Other

**FEE CALCULATION (fees effective 11/10/98)****1. FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
101	690	201	345	Utility filing fee	690.00
106	310	206	155	Design filing fee	
107	480	207	240	Plant filing fee	
108	690	208	345	Reissue filing fee	
114	150	214	75	Provisional filing fee	
<b>SUBTOTAL (1)</b>					<b>(\$ ) 690.00</b>

**2. CLAIMS**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
103	18	203	9	Claims in excess of 20	
102	78	202	39	Independent claims in excess of 3	
104	260	204	130	Multiple dependent claim	
109	78	209	39	Reissue independent claims over original patent	
110	22	18	9	Reissue claims in excess of 20 and over original patent	
<b>SUBTOTAL (2)</b>					<b>(\$ ) 0.00</b>

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing or cover sheet.	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for reexamination	
112	920	112	920	Requesting publication of SIR prior to Examiner action	
113	1,840	113	1,840	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for response within first month	
116	380	216	190	Extension for response within second month	
117	870	217	435	Extension for response within third month	
118	1,360	218	680	Extension for response within fourth month	
119	300	219	150	Notice of Appeal	
120	300	220	150	Filing a brief in support of an appeal	
121	260	221	130	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive unavoidably abandoned application	
141	1,210	241	605	Petition to revive unintentionally abandoned application	
142	1,210	242	605	Utility issue fee (or reissue)	
143	430	243	215	Design issue fee	
144	580	244	290	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Petitions related to provisional applications	
126	240	126	240	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	760	246	380	Filing a submission after final rejection (37 CFR 1.129(a))	
149	760	249	380	For each additional invention to be examined (37 CFR 1.129(b))	
Other fee (specify) _____					
Other fee (specify) _____					
<b>SUBTOTAL (3)</b>					<b>(\$ )</b>

\* Reduced by Basic Filing Fee Paid

SUBMITTED BY

Complete (if applicable)

Typed or Printed Name	Harold N. Wells	Reg. Number	26,044
Signature	<i>Harold N. Wells</i>	Date	6-9-00
		Deposit Acct. User ID	10-0447/47163-00018USD1

Form PTO-1449 (modified)	Atty. Docket No. 47163-00018USD1	Serial No. Not Assigned
List of Patents and Publications for Applicant's <b>INFORMATION DISCLOSURE STATEMENT</b>	Applicant Fujio Kuwako	
Page 1 of 1	Filing Date: Not Assigned	Group: Not Assigned

09/591523  
06/09/00

U.S. Patent Documents							
Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date if App.
	A01	5,403,672	04/1995	Urasaki et al.	428	607	
	A02						
	A03						
	A04						
	A05						

Foreign Patent Documents							
Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B01	WO97/41713	11/1997	PCT	H05K	3/02	N/A
	B02	Hei 4-3676	1/1992	Japan	H05K	3/46	Abstract
	B03						

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)		
Exam. Init.	Ref. Des.	Citation
	C01	"A Flexible Production Laser System for Blind Via Drilling," Anton Kitai and Jim Morrison, Lumonics, Kanata, Ontario Canada; from brochure <i>Proceedings of the Technical Conference Expo '98</i> , 4 pgs.; 1998
	C02	"CO <sub>2</sub> Laser Drilling Technology for Glass Fabrics Base Copper Clad Laminate,; Morio, Gaku, Hidenori Kimbara Nobuyuki Ikeguchi, Yoshihiro Kato, Mitsubishi Gas Chemical Company, Inc., Toyko, Japan; from brochure <i>Proceedings of the Technical Conference Expo '98</i> , 4 pgs; 1998
	C03	Kestenbaum, Ami, et al., "Laser Drilling Of Microvias In Epoxy-Glass Printed Circuit Boards," <i>IEEE Transactions On Components, Hybrids, and Manufacturing Technology</i> , Volume 13, No. 4, pp. 1055-1062 (December 1990)
	C04	Pargellis, A. N., et al., "Formation of Microvias In Eposy-Glass Composites By Laser Ablation," <i>Optics &amp; Laser Technology</i> , Volume 22, No. 3, pp. 205-207 (June 1990)

<b>EXAMINER:</b>	<b>DATE CONSIDERED:</b>
EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.	

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)

CHICAGO 120392v1 47163-00001